To find following the machine learning regression method using in r2 value

1.SIMPLE LINEAR REGRESSION(R^2 value)=0.97409

2.MULTIPLE LINEAR REGRESSION(R^2 value)=0.93586

3.Support Vector Machine:

S.NO	Hyper Parameter	Linear(r value)	RBF(Non Linear) (r value)	POLY (r value)	SIGMOID (r value)
1	C10	-0.03964	-0.0568	-0.05366	-0.05366
2	C100	0.10646	-0.05072	-0.0198	-0.03045
3	C500	0.59289	-0.02432	0.11468	0.07057
4	C1000	0.78028	0.00676	0.2661	0.18506
5	C2000	0.87677	0.06751	0.481	0.39706
6	C3000	0.89567	0.12322	0.637	0.59136

The **SVM Regression** use **R^2 value** (nonlinear (Linear) and hyper parameter (C3000))=0.89567

4.Decision Tree:

S.NO	CRITERION	MAX FEATURES	SPLITTER	R VALUE
1	Mse	auto	best	0.89715
2	Mse	auto	random	0.89715
3	Mse	sqrt	best	0.03205
4	Mse	sqrt	random	0.7454
5	Mse	Log2	best	0.80037
6	Mse	Log2	random	0.43114
7	Mae	auto	best	0.91804
8	Mae	auto	random	0.86887
9	Mae	sqrt	best	0.76767
10	Mae	sqrt	random	0.61801
11	Mae	Log2	best	0.47966
12	Mae	Log2	random	0.017076
13	Friedman_mse	auto	best	0.93085
14	Friedman_mse	auto	random	0.90069
15	Friedman_mse	sqrt	best	0.51303
16	Friedman_mse	sqrt	random	0.801203
17	Friedman_mse	Log2	best	0.6564
18	Friedman_mse	Log2	random	-1.17276

The **Decision Tree** Regression use **R^2 value** (Friedman_mse,auto,best)=0.93085